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ABSTRACT

This paper outlines issues related to transfer in the San Diego (California) Community College District (SDCCD), discusses approaches to studying transfer and provides data on the number and characteristics of SDCCD students included in the 1992 Transfer Assembly study conducted by the Center for the Study of Community Colleges at the University of California at Los Angeles (UCLA). The American Association of Community Colleges presentation "San Diego Community College District Transfer Rates: An Application of the National Transfer Assembly Approach" (Augie Gallego and Bill Armstrong) comprises the bulk of the document. The paper begins with a discussion of the lack of consensus on a definition of transfer rate and argues for the adoption of a longitudinal, cohort tracking approach, which follows the same group of students over time and allows enough time for new students to transfer. Next, findings from the 1992 Transfer Assembly are discussed for the three colleges in the SDCCD. Data tapes of student records for the fall 1986 cohort of first-time students who completed 12 or more transferable units were matched against enrollment files for all California State University and University of California campuses. Findings of the analysis include the following: (1) of the 12,948 first-time students in fall 1986, 27.4% (n=3,551) completed 12 or more transferable units during the subsequent 4 years; (2) of these students, 649 went on to a senior institution, for a transfer rate of 18.3%; (2) the percentage of fall, 1986 first-time minority students who completed 12 or more transferable units ranged from 25.9% for Black students (n=332), 32.2% for Asian students (n=255), 27% for Latino students (n=365), and 30.7% for Native American students (n=43); and (3) the percentage of these minority students who actually transferred to a California public senior institution ranged from 15.4% of Black students (n=51), 22.7% of Asian students (n=58), 16.7% of Latino students (n=61), and 16.3% of Native American students (n=7). Presentation materials and extensive data tables are included. (MAB)

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Building Indicators of Transfer Effectiveness for the San Diego Community College District
A Local Application of the Transfer Assembly Approach

William B. Armstrong
Gail Takahata

San Diego Community College District
Office of Research and Planning

Paper presented at the Annual National Convention
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Building Indicators of Transfer Effectiveness for the San Diego Community College District: A Local Application of the Transfer Assembly Approach

William B. Armstrong
& Gail Takahata
San Diego Community College District Research & Planning

Executive Summary

Introduction

The Research and Planning office reports annually to the governing board and chancellor on district transfer activities and data. This report serves that purpose and outlines broader issues concerning transfer. The introduction and background sections of this report provide a brief description of the various definitions of transfer and argues for the adoption and application of a consistent definition of transfer in order to accurately assess district transfer activities and performance. In addition, the discussion section of the report discusses the number and characteristics of SDCCD students included in the 1992 Transfer Assembly study conducted by the Center for the Study of Community Colleges at UCLA.

As important as the transfer function is to the community colleges, there remains a lack of consensus on a definition of a transfer rate (Banks, 1990, Cohen, 1987, McIntyre, 1987). Although it is generally agreed that the transfer rate is the ratio of students who transfer to the potential number of transfer students, there is less agreement on what constitutes a potential transfer student. Some colleges use total headcount, others use full-time equivalents, and still others use credit students only. Each of the definitions yield a very different rate of transfer.

Toward a Consistent Definition of Transfer in the SDCCD

A review of the various models of transfer found that although different researchers used different methodologies and "pools" of students to calculate transfer, the rates were similar when analyzed using a cohort tracking or longitudinal approach (Eaton & Palmer, 1991). The report concluded that nationally, "on the average, at least one out of five community students transfer" (ibid).

Although the various models and studies produced similar transfer rates, there are advantages to adopting a method that uses a cohort approach. First, cross-sectional methods compare transfers to the current student enrollment. The transfer group may be very different demographically and academically from the current group of students. In addition, if the group of transfers in the numerator is based on a larger pool than the current enrollment in the denominator, the rate would be artificially high and vice-versa (Garcia, 1990). Longitudinal cohort tracking models follow the same group of students over time. All comparisons are made on the same cohort. This approach yields high group and equivalence validity (ibid).

Second, longitudinal cohort tracking models are highly rated in construct and maturation validity. Construct validity refers to whether the model measures the theoretical concept it purports to measure. In this case, the proportion of transfers from a new cohort within a specified time period. Maturation validity focuses on whether the model allows enough time for new entrants to transfer.

A third advantage to using a longitudinal cohort tracking approach like the Transfer Assembly (TA) model (Cohen, 1990), is that the data are readily available. Some cross-sectional models such as the NETC model uses a student follow-up survey as its primary source for determining if a "leaver" transferred. Thus the transfer rate is in large part determined by the response rate to surveys, mobility rates of students, and differences among groups that tend to respond to surveys. The TA and other tracking approaches rely strictly on institutional data from the community colleges and senior institutions.

Method

The three colleges in the SDCCD were among the 155 community colleges that participated in the 1990 Transfer Assembly. A data tape of student ID numbers for the fall, 1986 first time cohort who completed 12 or more transferable units was matched against enrollment files for all of the CSU and UC campuses by the Center for the Study of Community Colleges (CSCC). This matched file was returned to the SDCCD Research and Planning office where further analyses of the cohort were conducted. In addition to ethnic and racial data, transferring students were identified in the SDCCD historical files and additional data pertaining to these students were included. Additional data elements included the educational objective of the student while enrolled in the SDCCD, transfer and cumulative GPA, numbers of semesters of attendance, the ratio of units attempted to units earned, graduation status, and average units per semester. Additional

demographic data analyzed included gender, age, and disability status. These data were matched by student ID number and added to each student record for the TA cohort.

Findings

Of the 42,646 students in the SDCCD during the fall, 1986 term, 12,948 were first-time students with no prior college experience. Of the first-time entering group, 3,551 or 27.4% completed 12 or more transferable units during the subsequent four years. Of these students in this cohort (the TA cohort), 649 went on to a senior institution for a SDCCD transfer rate of 18.3%.

Of the 649 students that transferred to a four-year institution, 562 transferred to one of the 20 California State University (CSU) campuses, 70 to one of the nine University of California (UC) campuses, and 17 transferred to both a CSU or UC campus. Over one-half of the transfer students attended Mesa College (60.4%), 28.5% attended City College, and 11.1% attended Miramar College.

Transfers by Racial/Ethnic Grouping

The percentage of fall, 1986 first time college students who completed 12 or more units over the subsequent four years ranged from 25.9% for black students to 32.2% for Asian students with a SDCCD average of 27.4%. The percentage of first-time 12 unit students who transferred to a California public senior institution (the TA rate) ranged from 15.4% of black students to 22.7% of Asian students, with a SDCCD average of 18.3%. As noted in the "Profile" section of the report, the percentage distributions of the demographic and community college achievement factors for the TA cohort and the CSU transfers were approximately similar. This suggests that although the CSU transfers comprised only a small proportion (16.3%) of the total TA cohort, they were generally a representative sample of the cohort. In other words, although the transfers were not entirely representative of the SDCCD general population, CSU transfers from the fall, 1986 cohort were representative of the SDCCD's first-time students who completed 12 or more transferable units.

Summary and Recommendations

For a model to be informative and useful to our colleges, it must be easy to calculate, understandable, inexpensive, timely, and communicable. The advantage of using a consistent definition of transfer is the ability to track trends over time. By looking at the transfer rate before and after the implementation of a program

(such as Transfer Centers, articulation agreements, matriculation, etc.), the possible impacts of the program on transfer can be studied. The analysis of various methods for calculating transfer indicated that the adoption of the Transfer Assembly approach to be the most useful based on its methodology, validity, and relatively low cost. Additionally, it had the added advantage of being readily understood by a variety of constituents ranging from faculty and staff, journalists, board members, and community groups and organizations. The report recommended the adoption of this approach in monitoring SDCCD transfer activities.

Using the data matching method developed by the CSCC, the Research and Planning office will continue to work with our local CSU campus (San Diego State University) to collect data on successive cohorts of entering students. This effort should be expanded to include the local UC campus and private universities such as the University of San Diego, Point Loma College, and National University. The data match method for tracking transfer has provided valuable information for planning and assessment of SDCCD transfer activities. This will also assist in the SDCCD response to external mandates such as Accountability, Student Equity Policy, Matriculation, and Student Right-to-Know legislation.

Recommendations

The SDCCD should explore additional means of moving toward the state goal of educational equity. Certain groups such as Latino/Hispanic and black students are represented in the transfer profile sample in a smaller proportion than their representation in the SDCCD's general student population and the larger community. With increasing fees for UC and CSU attendance, and admissions policies that accept only the top one-eighth of high school graduates at the UC, and the highest one-third at the CSU, community colleges represent often the only viable alternative for these groups to attain the bachelor's degree.

San Diego Community College District Transfer Rates:

An Application of the National Transfer Assembly Approach

AACC Presentation

Augie Gallego
Bill Armstrong

San Diego Community College District

Why Track Transfer?

Traditional Emphasis

Vertical Focus of Higher Education Role of Community Colleges

Provide First Two Years of Undergraduate Education

Why Track Transfer?
(cont.)

Legislative Mandates

Statewide Accountability System
(AB-1725)

- Student Success Component

Federal Student *Right-to-Know*
Legislation

- Graduation and Transfer Rates of First-Time Cohort of Students to be Reported to all Incoming Students

Student Equity Legislation

Factors Found to Affect Transfer

(Knoell & Lombardi, 1987)

Proximity to Four-Year Institutions

Breadth and Diversity of the Curriculum

Articulation Agreements

Student and Community Demographics

Student Socio-Economic Status

Campus Climate

Calculating the Rate

Pick a Number

Transfer Rate can Vary Tremendously Depending on Denominator

(e.g.)

Transfers

- All Credit Students

Transfers

- Transfer Objective Students

Transfers

- Associate Degree Completers

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Recommended Approaches to Calculating Transfer (Statewide Accountability Model)

- Inter-Segmental Coordinating Council (ICC)
- Transfer Assembly
- National Effective Transfer Consortium (Berman & Weiler) (Cross-Sectional)

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Value of Cohort Approach

- Longitudinal
- Changes over Time
- High Validity

San Diego County High School Graduates
Continuing to California Public Higher Education Institutions

	Asian	African American	Filipino	Latino	Caucasian	Total
High School Graduates	**1362**	**1378**	**1196**	**3987**	**11634**	**19660**
	# / %	# / %	# / %	# / %	# / %	# / %
HS Grads to Higher Ed.	776 / 57.0	490 / 35.6	723 / 60.5	1972 / 49.5	5720 / 49.2	9785 / 49.8
FT Freshmen CCC	373 / 48.1	340 / 69.4	388 / 53.7	1525 / 77.3	4098 / 71.6	6804 / 69.5
FT Freshmen CSU	202 / 26.0	97 / 19.8	230 / 31.8	261 / 13.2	871 / 15.2	1676 / 17.1
FT Freshmen UC	201 / 25.9	53 / 10.8	105 / 14.5	186 / 9.4	751 / 13.1	1305 / 13.3

t-ed cnty hs grads/hs ed inst

Note: Data does not include "Other", "No Response" & "Native American"

Prepared by: Research & Planning 11/92

Source: CPEC

Table 1
Nationwide Credit and Transfer Rates of Colleges in the Transfer Assembly

	Fall 1984 (48 colleges)	Fall 1985 (114 Colleges)	Fall 1986 (155 Colleges)	Fall 1987 (361)
Entrants with no prior college experience	77,903	191,748	267,150	504,889
Entrants with no prior college who completed 12+ units in 4 years	39,351	89,638	124,885	236,267
C / E	50.5%	46.7%	46.7%	46.8%
Entrants with no prior college who completed 12+ units & transferred to a senior institution	9,316	21,171	29,180	53,365
T / C	23.7%	23.6%	23.4%	22.6%

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Prepared by: Research & Planning 4/93

Source: Center for the Study of Community Colleges, 1992

Cross-Sectional Measures of Transfer Rates for California Community Colleges: 1982-83

Total Enrollments	Number of Transfers	Transfer Rate	Denominator
1,354,949	50,537	**3.7%**	**Credit/Noncredit and Continuing Students**
Total Credit Enrollment			
1,164,195	50,537	**4.3%**	**Includes Continuing but Eliminates Noncredit**
Full-Time Credit			
303,584	50,537	**16.6%**	**Includes Continuing. Eliminates Noncredit and Part-time Credit Enrollment***
First-Time Freshman			
285,108	50,537	**17.7%**	**Includes Full-Time and Part-Time Students. Eliminates Noncredit and Continuing Students**

* Part-time Credit enrollment is 74% of the total credit enrollment

Table Two

Average Transfer Rates Emerging in National Studies

Study Source	Data	Cohort for Which Transfer Rate Applies	Mean Transfer Rate
Transfer Assembly (Cohen, 1991)	Students at 114 two-year colleges with minority enrollments of at least 20%	Students who enrolled at the colleges with no prior college experience in the Fall of 1985 and who earned at least 12 colleges-level credits within 4 years	23%
National Effective Transfer Consortium (Berman and others, 1990)	Students enrolled at the 28 member institutions of the NETC	Students who were enrolled at the collegs in the spring of 1988 who had completed at least six credits by the end of the spring 1988 term and who did not reenroll in the fall of 1988	25%
Lee and Frank (1990)	High School & Beyond	1980 high school graduates who enrolled at a community college at some point in the first two years after high school graduation	24%
Grubb (1990a; 1991)	High School & Beyond	1980 high school graduates who started their postsecondary careers at two-year colleges	20%
Grubb 1990a; 1991)	NLS 72	1972 high school graduates who started their postsecondary careers at two-year colleges	29%
Adelman (1988)	NLS 72	1972 high school graduates who enrolled at a community college at any point through 1984	21%

San Diego Community College District
Transfer Assembly Fall 1986 & Fall 1987 Entering Cohort

	African American	Asian	Caucasian	Latino	Native American	Other	District
# of students entering F'86 with no prior college experience	1,280	789	8,523	1,357	140	859	12,948
# of F'86 Entrants with no prior college who completed 12+ units	332	255	2,297	365	43	259	3,551
C / E	25.9%	32.3%	27.0%	27.0%	30.7%	30.2%	27.4%
# of students entering F'87 with no prior college experience	1,483	1,680	11,668	1,808	232	447	17,318
# of F'87 Entrants with no prior college who completed 12+ Units	465	615	3,563	529	62	121	5,355
C / E	31.4%	36.6%	30.5%	29.3%	26.7%	27.1%	30.9%

Prepared by: Research & Planning 4/93

San Diego Community College District
Transfer Assembly Fall 1986 & Fall 1987 Entering Cohort

	Fall 1986		Fall 1987
# of students entering F'86 with no prior college experience	12,948	# of student entering F'87 with no prior college experience	17,318
# of F'86 Entrants with no prior college who completed 12+ units	3,551	# of F'87 Entrants with no prior college who completed 12+ units	5,355
C / E	27.4%	C / E	30.9%
# F'86 entrants with no prior college who completed 12+ units & transferred to a senior institution	649	# F'87 entrants with no prior college who completed 12+ units & transferred to a senior institution	1,117
T / C	18.3%	T / C	20.9%

1-86/87 TA cohort comps

Prepared by: Research & Planning 4/93

Table 3
Transfer Assembly Fall 1986 Entering Cohort
San Diego Community College District

	African American	Asian	Caucasian	Latino	Native American	Other	District
# of students entering F'86 with no prior college experience	1280	789	8523	1357	140	859	12,948
# of F'86 Entrants with no prior college who completed 12+ Units	332	255	2297	365	43	259	3,551
C / E	25.9%	32.3%	27.0%	27.0%	30.7%	30.2%	27.4%
# F'86 entrants with no prior college who completed 12+ units & transferred to a senior institution	51	58	423	61	7	49	649
T / C	15.4%	22.7%	18.4%	16.7%	16.3%	18.9%	18.3%

I-TA 86 entrg cohort sdccd

Prepared by: Research & Planning 10/92

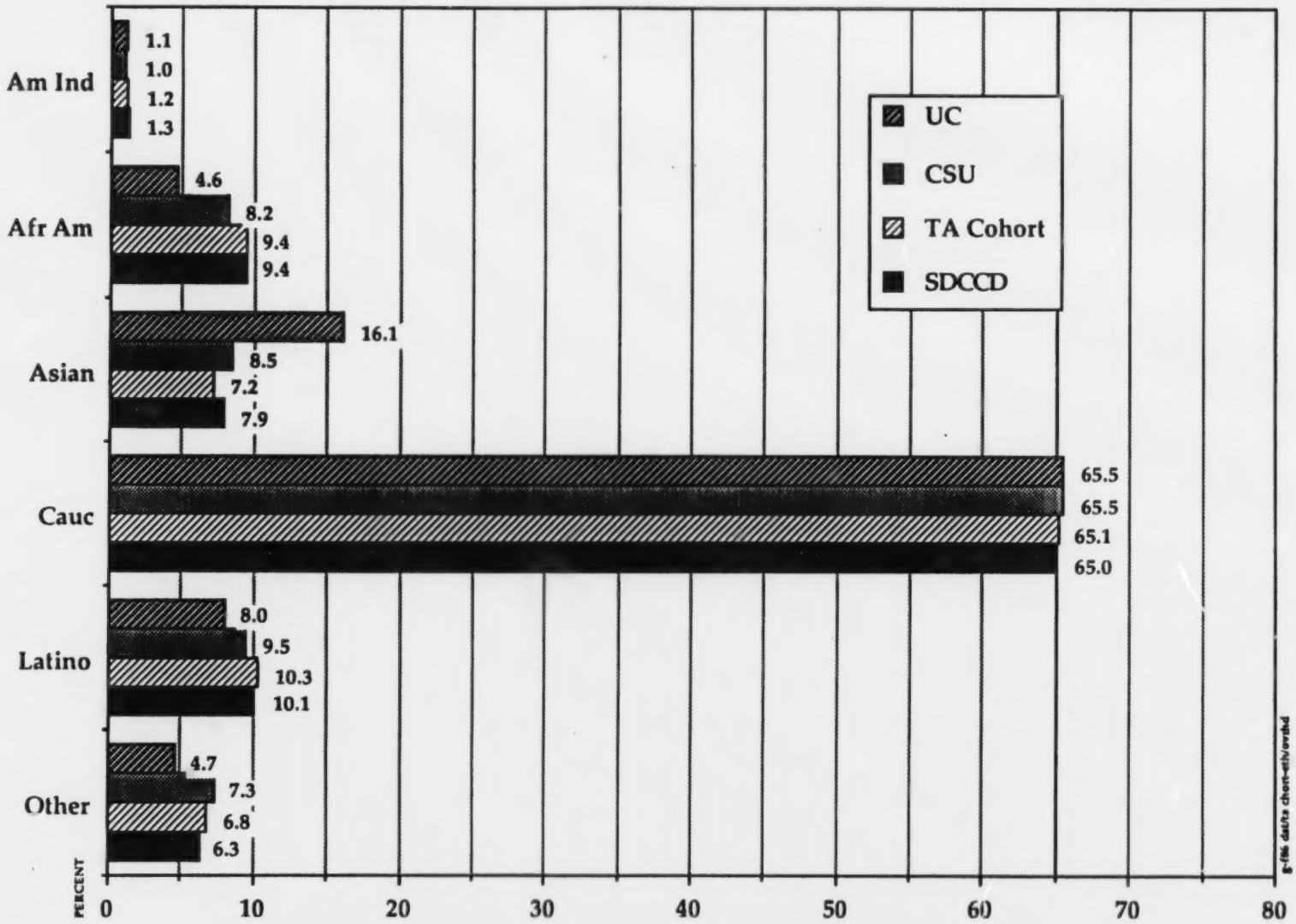
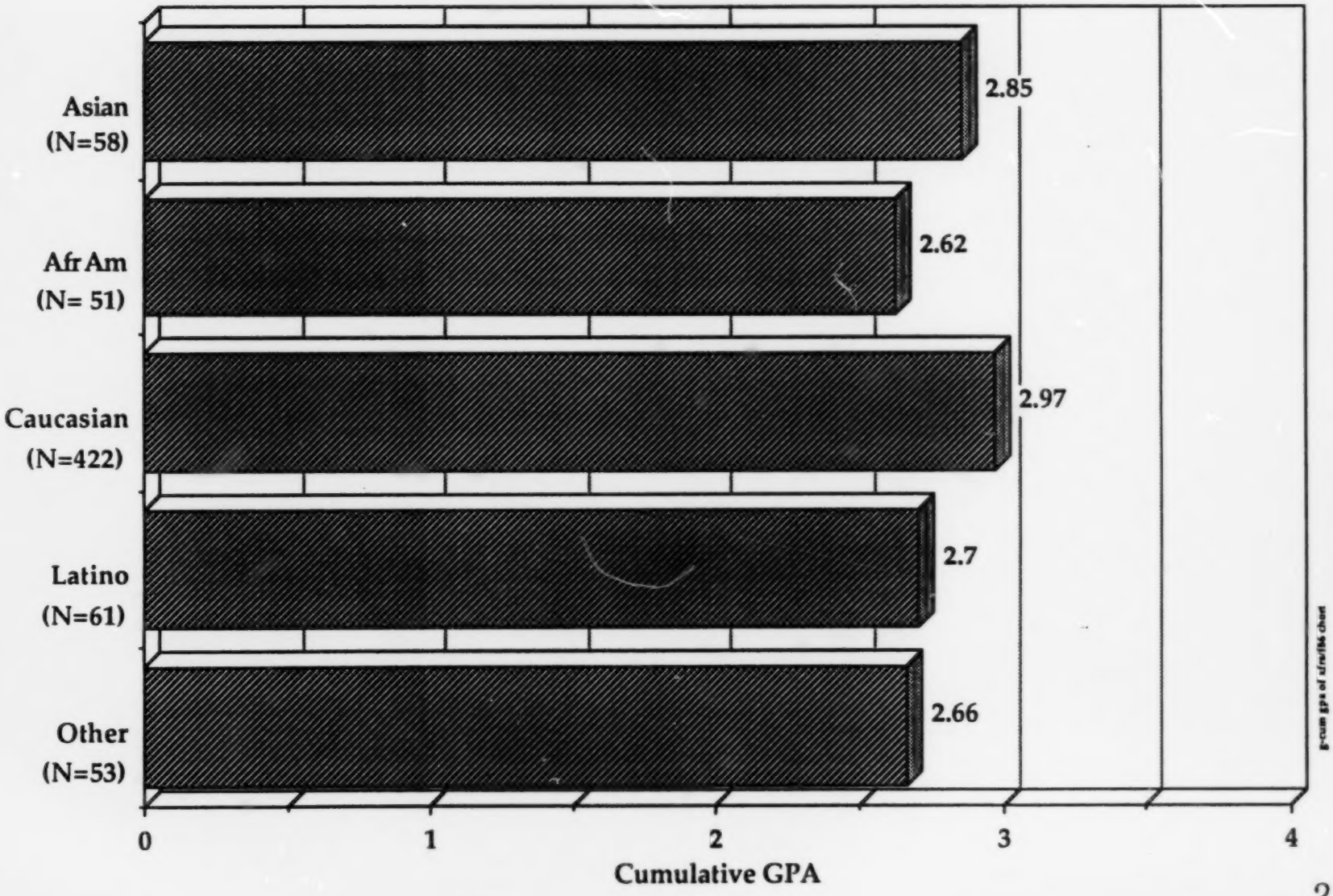
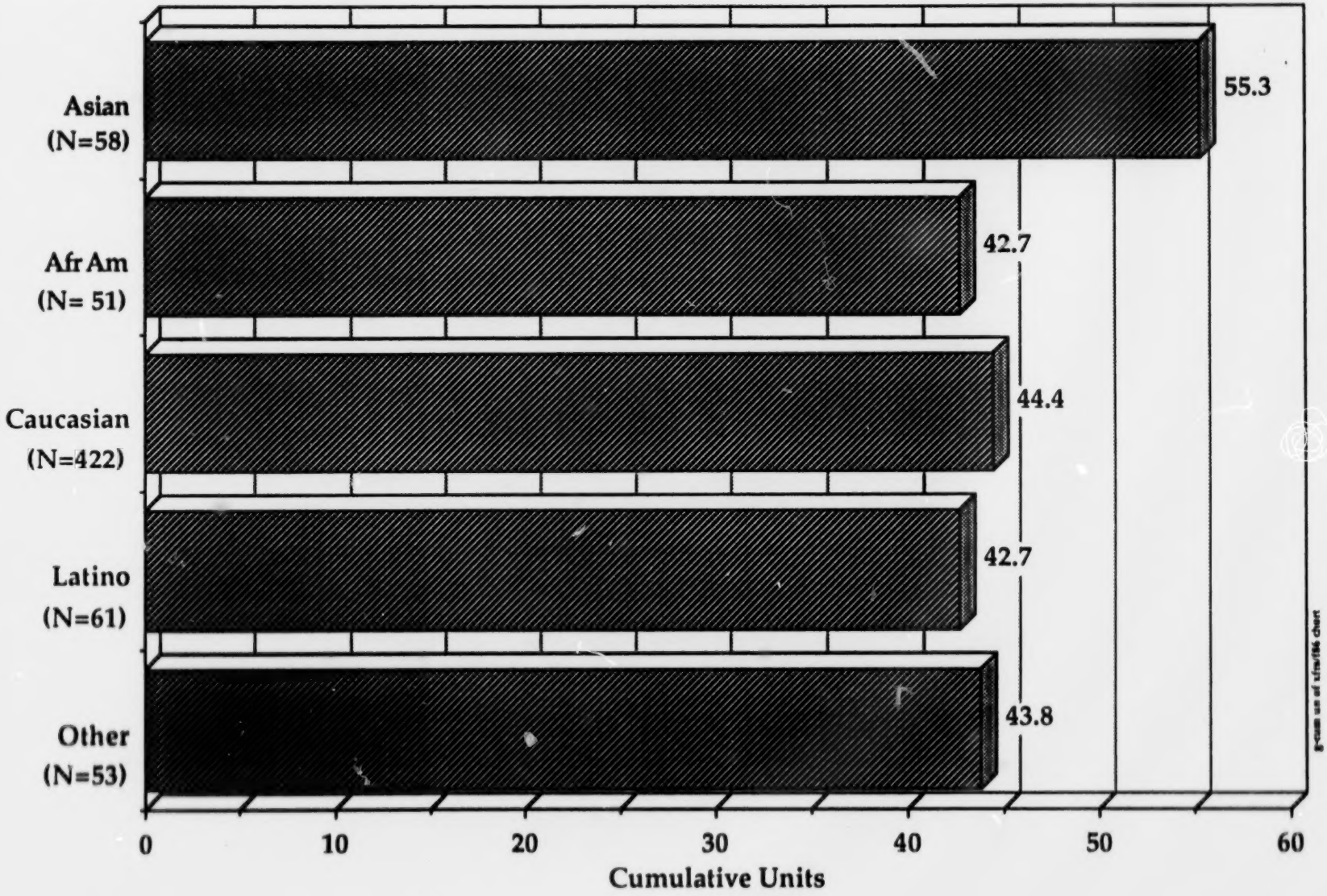


Figure 2 Racial/Ethnic distribution for Fall 1986 SDCCD Student Population, the Fall 1986 Transfer Assembly (TA) cohort, and transfers to the CSU and the UC from the Fall 1986 Transfer Assembly cohort

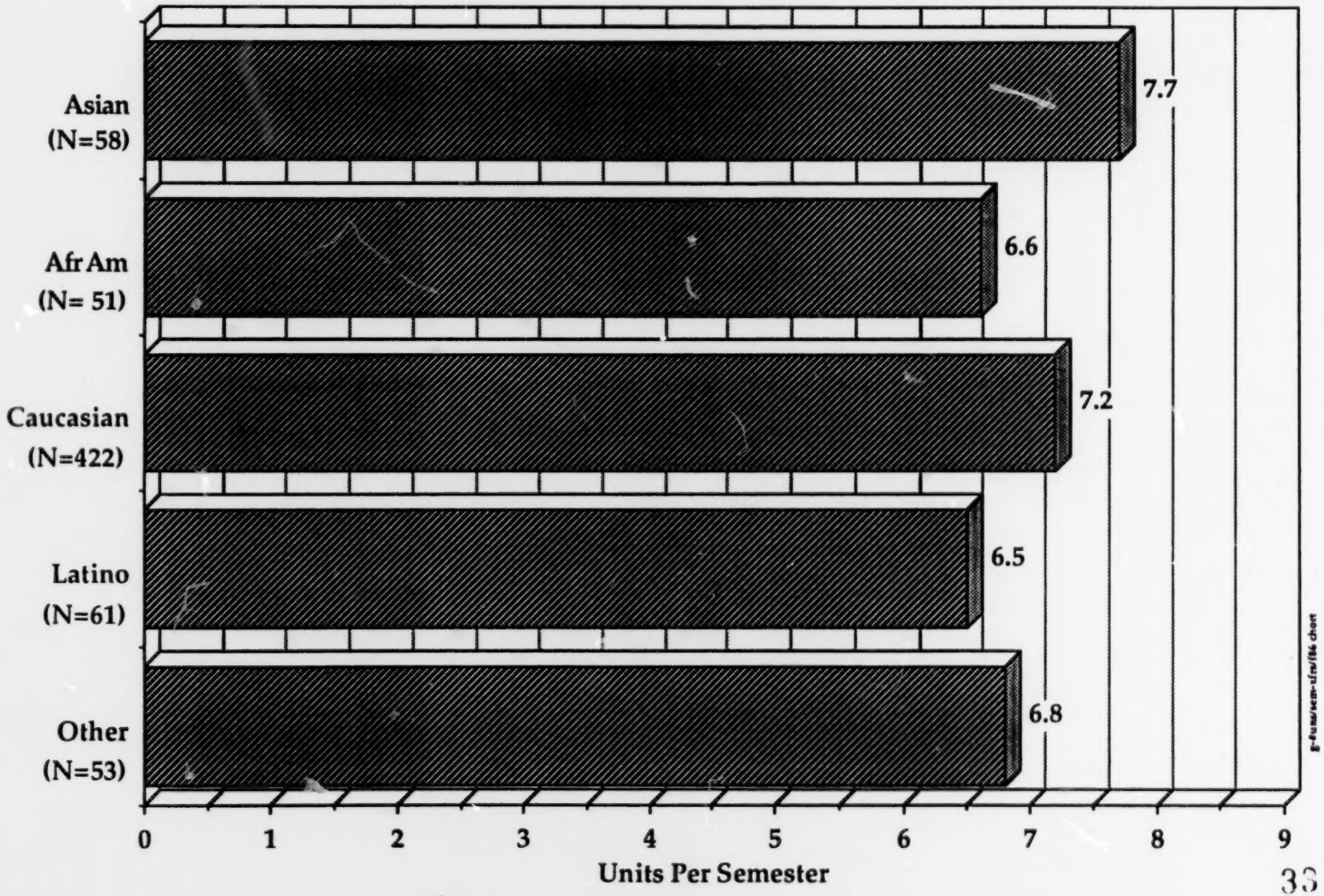
Cumulative GPA of Transfers from the Fall 1986 Transfer Assembly Cohort



Cumulative Units of Transfers from the Fall 1986 Transfer Assembly Cohort



Number of Units Taken Per Semester by Transfers
Fall 1986 Transfer Assembly Cohort



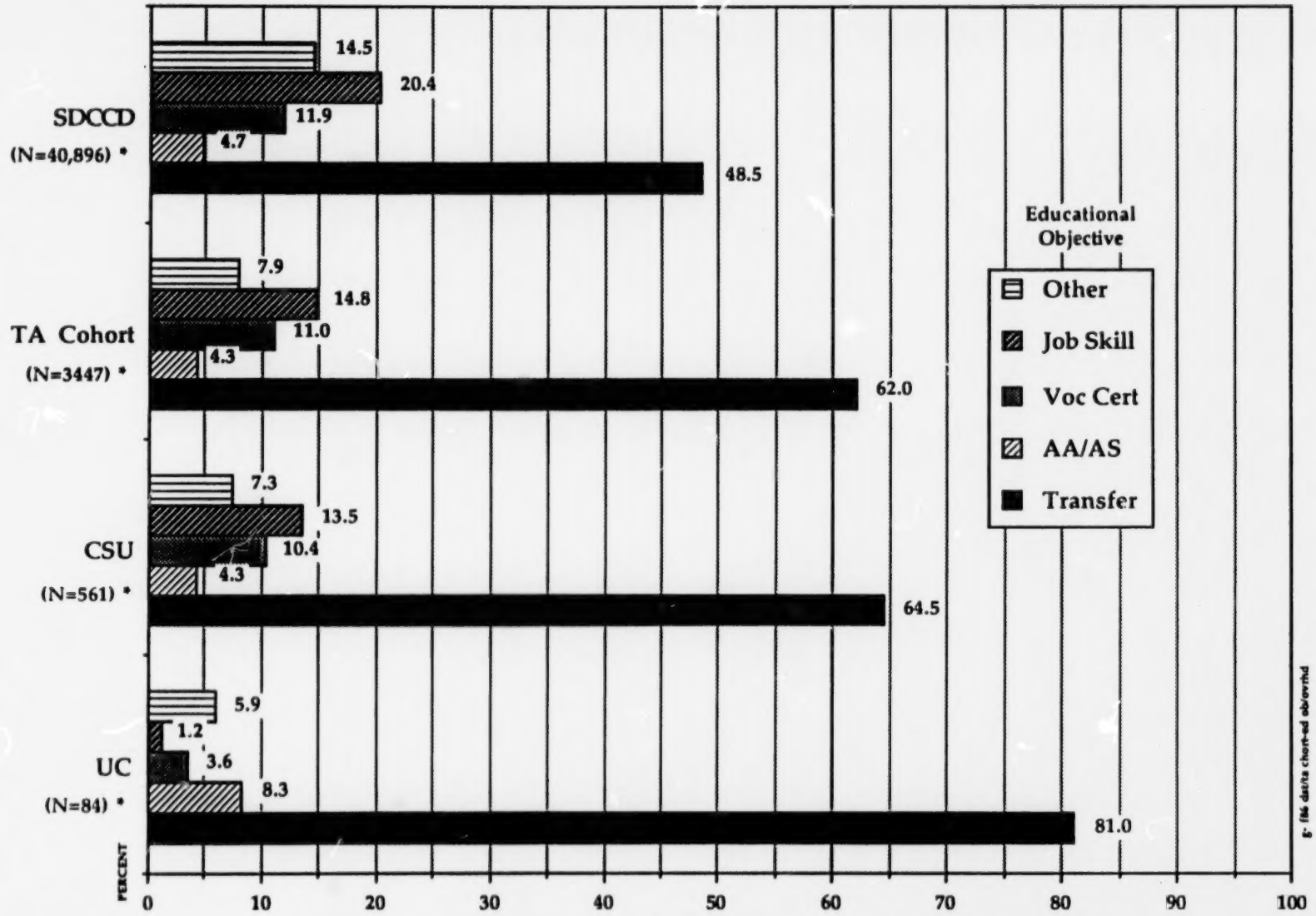


Figure 4

Educational Objective distribution for Fall 1986 SDCCD Student Population, the Fall 1986 Transfer Assembly (TA) cohort, and transfers to the CSU and the UC from the Fall 1986 Transfer Assembly cohort

** Missing values excluded*

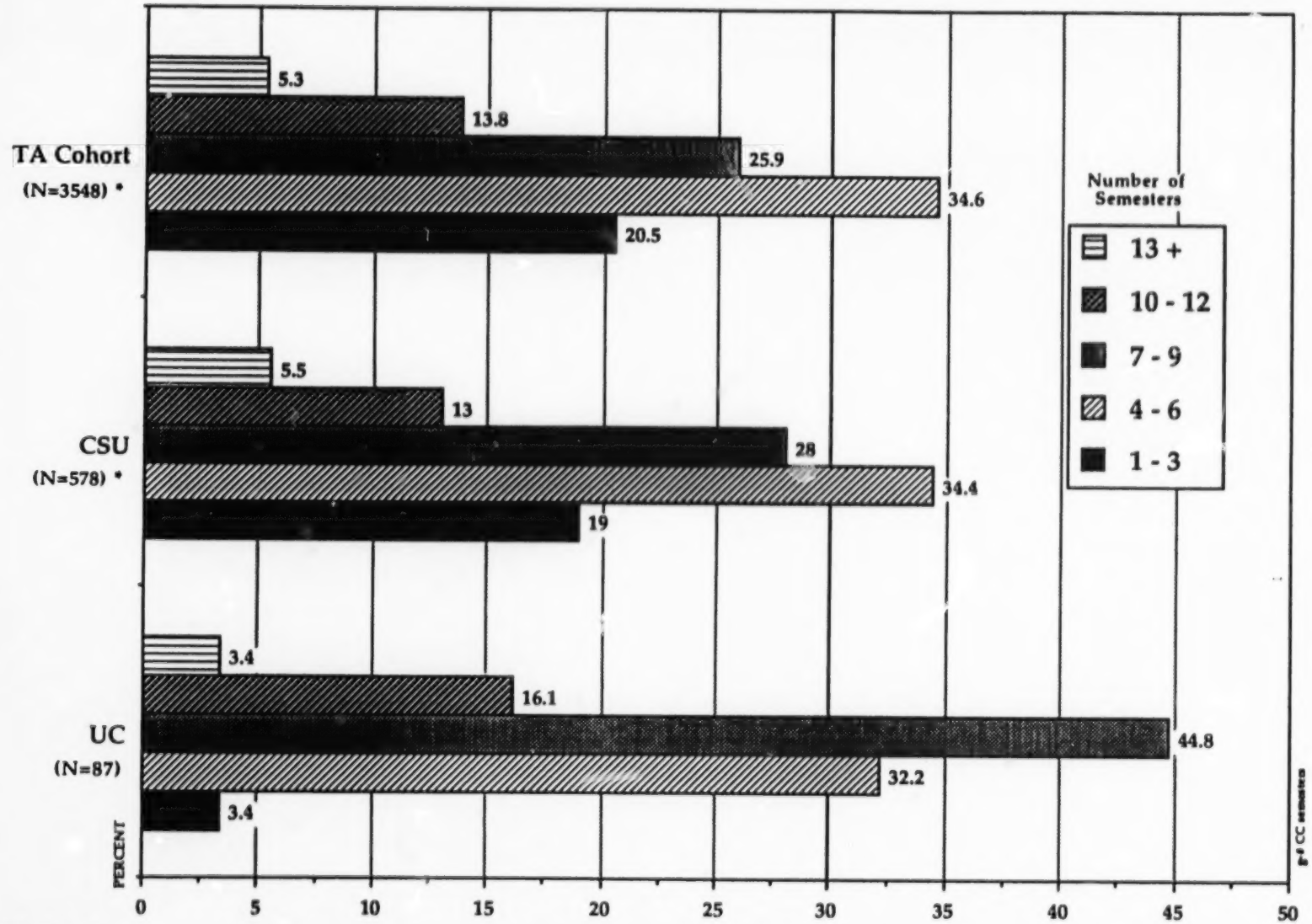


Figure 7

Distribution of the number of semeters of community college attendance for the Fall 1986 Transfer Assembly (TA) cohort, and transfers to the CSU and the UC from the Fall 1986 Transfer Assembly cohort

** Missing values excluded*

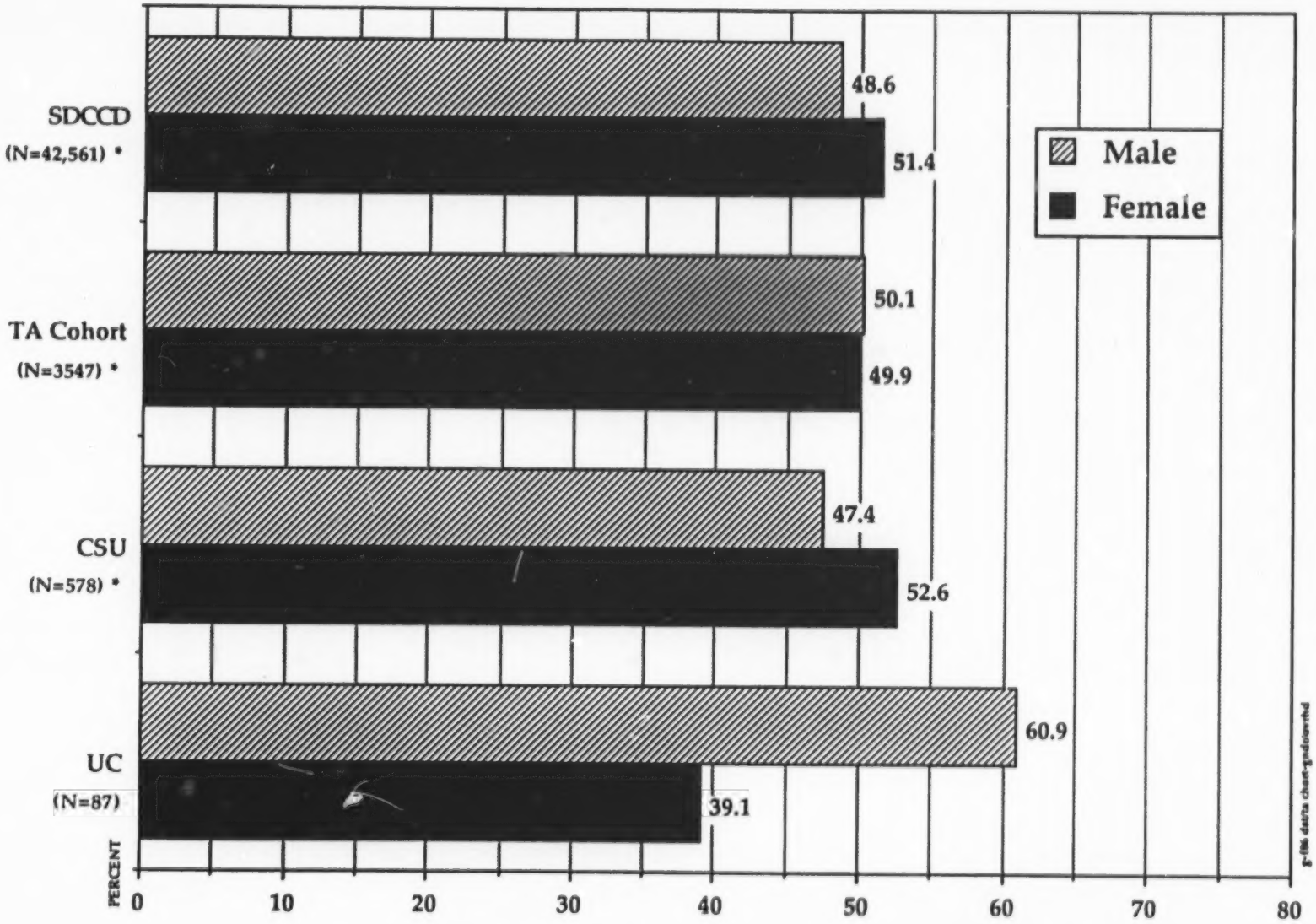


Figure 1

Gender distribution for Fall 1986 SDCCD Student Population, the Fall 1986 Transfer Assembly (TA) cohort, and transfers to the CSU and the UC from the Fall 1986 Transfer Assembly cohort

** Missing values excluded*